

Determination: NFA

PA/VSİ Or RFA FILE REVIEW CHECKLIST

Facility Name: Henkel Surface Tech. (Parker Div.)

EPA ID: MID 057 676 124_____ City: Madison Heights_____ State: MI_____

Name of Reviewer: Maureen McHugh_____ Date of Review: 8/8/08_____

1	Yes	No	Is this a one folder site?
2	Yes	No	Are there Superfund files for this site?
3	Yes	No	Did you Read the Executive Summary?
			There are: <u> 6 </u> SWMUs and <u> 0 </u> AOCs at this site.
4	Yes	No	Did you review the regulatory history?
5	Yes	No	Does the facility have interim status or a permit?
			This facility is a: <u> </u> SQG, <u> X </u> LQG, or <u> </u> Less than 90 day.
6	Yes	No	Was the Facility closed per RCRA? RCRAInfo 380 (1992)
			If Yes, was the closure: <u> X </u> CC, or <u> </u> CIP.
7	Yes	No	Are there documented (historical) releases? Briefly describe on Page 2.
8	Yes	No	Were there releases identified during the inspection? Briefly describe on Page 2.
9	Yes	No	Do you agree with the Conclusions and Recommendations?
			If No, briefly describe on Page 2.

As a result of your review of the PA/VSİ or RFA file, please classify this site as:

 X No further corrective action recommended or warranted: These are sites that closed the regulated units and any other SWMUs or AOCs at the site did not warrant any further corrective action (no historic releases or evidence of releases observed during the Visual Site Inspection).

 Further Action Required: Soil or sediment sampling or groundwater sampling or monitoring or any type of investigation that was recommended in the report in response to a documented or observed release at any SWMU or AOC and where such investigation, whether being addressed during the inspection or after, does not have the necessary documentation in the facility record files.

 More Information Needed: There is no RFA, PA/VSİ or RCRA closure information available.

PA/VSİ Or RFA FILE REVIEW CHECKLIST

Notes

Briefly describe any documented (historical) releases for any SWMU or AOC recorded in the report. For each release, please identify the SWMU or AOC and a one or two line description of release.

Chromium, xylene, and ethylbenzene contamination above background levels were detected at SWMU1. Clean closure was approved in 1992.

Briefly describe any releases observed during the inspection for any SWMU or AOC recorded in the report. For each release, please identify the SWMU or AOC and a one or two line description of release.

Strong solvent odor was noted at the waste paint storage area (SWMU4)

PA/VSİ Recommendations

Nothing that warrants RRB attention. NFA.

Henkel

63
Henkel Corporation
Parker+Amchem

November 13, 1992

RECEIVED
NOV 19 1992

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

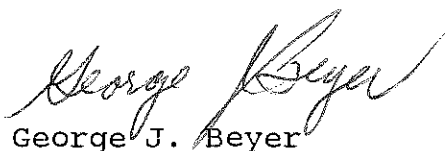
U.S. Environmental Protection Agency
Region V, RCRA
230 South Dearborn Street
Chicago, Illinois 60604

Reference: PRC Environmental Management, Inc.
VSI Project No. 209-R05032M140
Parker+Amchem
EPA I.D. No. MID057676124

Dear Sir:

On March 10, 1992, our facility, as noted above, was subjected to a Visual Site Inspection by your contract company PRC Environmental Management, Inc. Please supply us with a copy of this inspection report. Send to my attention at the address below:

Thank you.


George J. Beyer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

Recd 11/19/92
Compliance

REPLY TO THE ATTENTION OF:

HRE-8J

November 5, 1992

Mr. George Beyer
Parker & Amchem Henkel Corp.
32100 Stephenson Highway
Madison Heights, MI 48071

Re: Visual Site Inspection
Parker & Amchem Henkel Corp.
Madison Heights, Michigan 48071
MID 057 676 124

Dear Mr. Beyer:

As indicated in the letter of introduction sent to you on February 25, 1992, the U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations sections have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

Kevin M. Pierard, Chief
Minnesota/Ohio Technical Enforcement Section
RCRA Enforcement Branch

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118



**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**Parker + Amchem Henkel Corporation
Madison Heights, Michigan
MID 057 676 124**

FINAL REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

Work Assignment No.	:	R05032
EPA Region	:	5
Site No.	:	MID 057 676 124
Date Prepared	:	September 4, 1992
Contract No.	:	68-W9-0006
PRC No.	:	209-R05032MI40
Prepared by	:	PRC Environmental Management, Inc. (Judy Wagner)
Contractor Project Manager	:	Shin Ahn
Telephone No.	:	(312) 856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	(312) 886-4448

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION	1
2.0 FACILITY DESCRIPTION	4
2.1 FACILITY LOCATION	4
2.2 FACILITY OPERATIONS	4
2.3 WASTE GENERATING PROCESSES	6
2.4 HISTORY OF DOCUMENTED RELEASES	11
2.5 REGULATORY HISTORY	12
2.6 ENVIRONMENTAL SETTING	13
2.6.1 Climate	14
2.6.2 Flood Plain and Surface Water	14
2.6.3 Geology and Soils	14
2.6.4 Ground Water	15
2.7 RECEPTORS	16
3.0 SOLID WASTE MANAGEMENT UNITS	18
4.0 AREAS OF CONCERN	26
5.0 CONCLUSIONS AND RECOMMENDATIONS	27
REFERENCES	32

Attachment

- A VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS
- B VISUAL SITE INSPECTION FIELD NOTES

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	SOLID WASTE MANAGEMENT UNITS (SWMU)	7
2	SOLID WASTES	10
3	SWMU SUMMARY	28

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	FACILITY LOCATION	5
2	FACILITY LAYOUT	8

RELEASED
DATE 12/4/00
RIN #
INITIALS WV

EXECUTIVE SUMMARY

ENFORCEMENT
CONFIDENTIAL

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Parker + Amchem Henkel Corporation (Parker-Amchem) facility in Madison Heights, Michigan. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs. No AOCs were identified during the inspection.

The Parker-Amchem facility is used as a research and development center. The facility houses mostly business and sales offices, with no manufacturing or production processes. Research and development is related to developing chemicals for use by the metal finishing industry. The facility generates and manages the following hazardous waste streams: waste mineral spirits (F003, F004, and F005), waste water-based paint (D006), and lab packs (generally D001, D002, D007, D009, and U080¹). The facility generates and manages the following nonhazardous waste streams: filter press sludge, wastewater, wash water, heat transfer oil, waste oil, lubricants, and oil emulsion. The facility has operated at its current location since 1971. The facility occupies approximately 9 acres in a mixed-use area and employs 302 people. The facility's regulatory status is that of a interim status storage facility, however the facility is operating as a large-quantity generator. The facility has two container storage areas which are undergoing RCRA-closure.

Before 1971, the building was occupied by an engineering firm. When research and development operations began in 1971, the facility was owned by Hooker Chemical. Oxy Metal Industries Corporation became the owners sometime prior to 1980. Ford Motor Company bought the facility in 1983. The facility was then purchased by Henkel Corporation in 1987. Henkel combined its Amchem Division with Parker Chemical Company (the name of the facility when owned by Ford Motor Company).

The PA/VSI identified the following 6 SWMUs and no AOCs at the facility:

Solid Waste Management Units

1. Hazardous Waste Storage Shed
2. Wastewater Treatment System

¹ The most current (1988) Part A permit application listed the following waste codes: F001, F003, U002, U057, U117, F005, U154, D002, D007, D003, P030, P119, U013, U044, U056, U122, U123, U134, U162, U188, U209, U213, U219, and D001. The last lab pack manifest listed the following waste codes: D001, D002, D007, D009, and U080.

ENFORCEMENT
CONFIDENTIAL

3. Indoor Hazardous Waste Storage Pad
4. Waste Paint Storage Area
5. Nonhazardous Waste Storage Area
6. Wash Water Storage Area

The potential for release to ground water is low for all SWMUs. The facility is in an area where use of ground water is very limited. Some private residential wells are located approximately 1 mile southeast of the facility. However, all other water used in Madison Heights is obtained from the City of Detroit. The Hazardous Waste Storage Shed (SWMU 1) has undergone closure during which portions of the concrete floor were removed, contaminated soil was removed, concrete was replaced, diking was added, and the entire floor was sealed.

The potential for release to surface water is low for all SWMUs. The facility is relatively level and significant surface water bodies are approximately 0.75 mile from the facility. An area drainage ditch is located 2,000 feet west of the facility with a high school separating the facility from the ditch. Stormwater runoff from the facility discharges to on-site storm sewers that eventually lead to a City of Detroit publicly-owned treatment works. Sensitive environments are not located on the facility's property.

The Waste Paint Storage Area (SWMU 4) has a moderate potential for release to air. PRC noted a strong solvent odor and open drums inside this area while inspecting this SWMU. All other SWMUs have a low potential for release to air due to indoor storage and limited access.

The potential for release to on-site soils is low for all SWMUs. All SWMUs are located indoors and site security limits the public from coming in contact with on-site soils. Soils contaminated with chromium, xylene, and ethyl benzene were removed from beneath the floor of Hazardous Waste Storage Shed (SWMU 1) as part of RCRA-closure activities.

PRC recommends that Parker-Amchem improve general housekeeping in the Waste Paint Storage Area (SWMU 4) by segregating hazardous waste, nonhazardous waste, and supplies. The facility should clearly label and tightly close all drums in this area. PRC recommends that the edges of the doors to the Hazardous Waste Storage Shed (SWMU 1) be sealed so rain water cannot enter the unit. Also, the hazardous wastes accumulated in SWMU 1 should be segregated from nonhazardous wastes. All drums should be clearly labelled. PRC also recommends that the facility obtain written documentation of final closure approval from EPA or MDNR for the Indoor Hazardous Waste Storage Pad (SWMU 3). Wash water that was temporarily being held in the Wash Water Storage Area (SWMU 6) was disposed of subsequent to the VSI.

RELEASED
DATE 12/4/00
RIN # 017
INITIALS

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. R05032 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading-unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all visible SWMUs, identifying evidence of releases, initially identifying potential sampling parameters and locations, if needed, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI conducted at the Parker + Amchem Henkel Corporation (Parker-Amchem) facility in Madison Heights, Michigan. The PA was conducted on March 2, 1992. PRC gathered and reviewed information from the Michigan Department of Natural Resources (MDNR) and from EPA Region 5 RCRA files. Information from the U.S. Geological Survey, the Federal Emergency Management Agency, a National Wetland Inventory Map, and the National Oceanic and Atmospheric Administration was also used. The VSI was conducted on March 10, 1992. It included interviews with six facility representatives and a walk-through inspection of the facility. Six SWMUs and no AOCs were identified at the facility.

The VSI is summarized and ten inspection photographs are included in Attachment A.
Field notes from the VSI are included in Attachment B.

2.0 FACILITY DESCRIPTION

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors.

2.1 FACILITY LOCATION

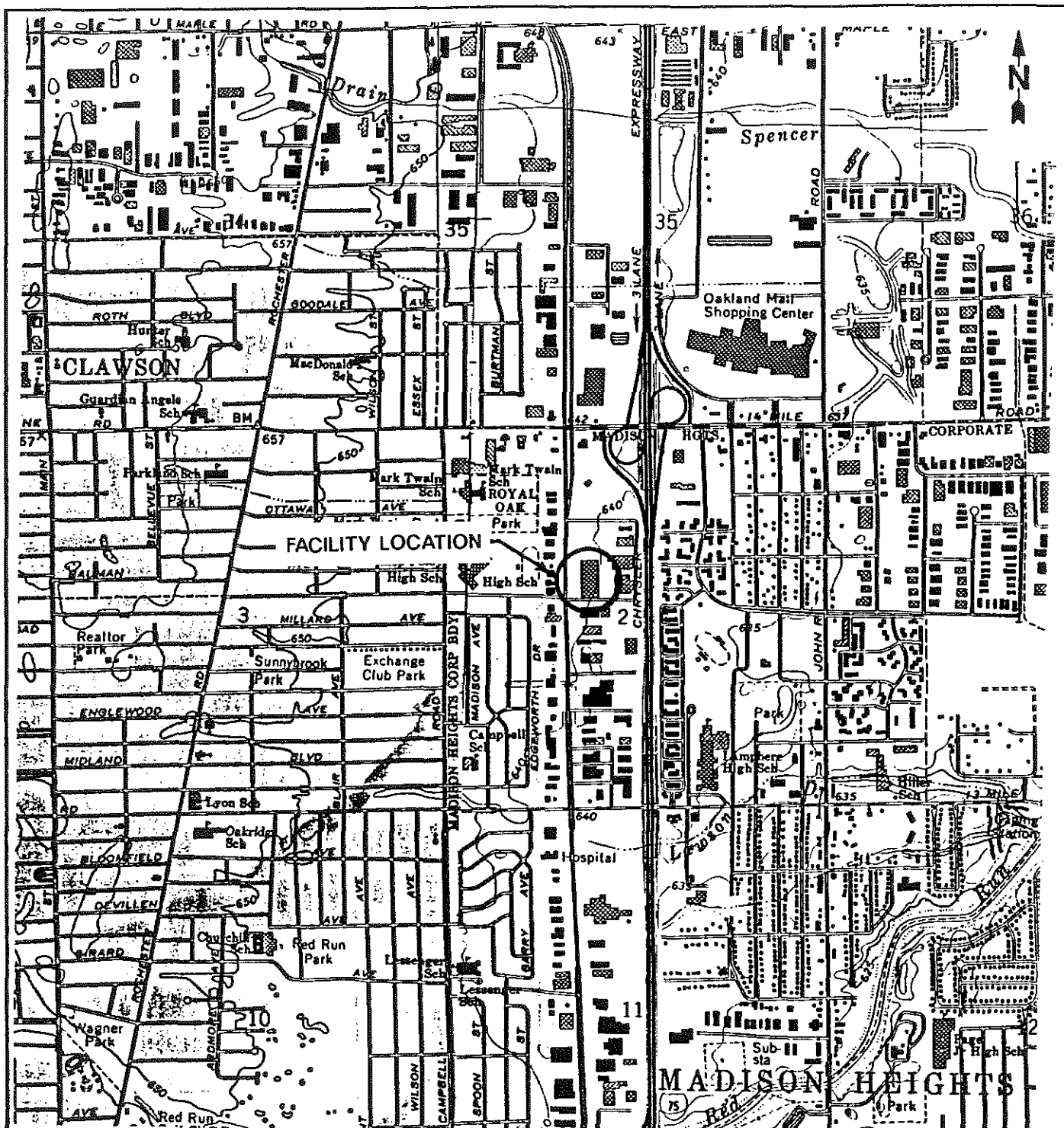
The Parker-Amchem facility is located at 32100 Stephenson Highway in Madison Heights, Oakland County, Michigan (latitude 42° 32' 00" N and longitude 83° 08' 30" W), as shown in Figure 1. The facility occupies approximately 9 acres in an mixed-use area.

The Parker-Amchem facility is bordered on the north by a hotel, on the west by small businesses, and on the south and east by industrial facilities. The nearest residences are located less than one quarter of a mile southwest of the facility.

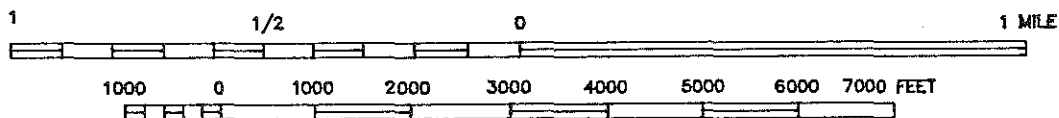
2.2 FACILITY OPERATIONS

The Parker-Amchem facility is a research and development center. The facility researches, develops, and tests chemicals for use by the metal processing and finishing industry. The facility houses mostly business and sales offices, with no full-scale manufacturing or production processes. Currently, various sections of the facility include laboratories, pilot-scale production machinery, pilot-scale aluminum can coating, metal working, metal finishing, a customer service section, and an equipment engineering section. The research and development laboratories and related pilot plants use small quantities of various chemical compounds. Most of the compounds are stored on shelves in chemical stockrooms or other storage areas throughout the facility. Other raw materials, such as small steel coils or metal samples, are shipped to the facility from steel manufacturers or steel users. This material is delivered to individual laboratories or test areas where Parker-Amchem tests different chemical compounds used to treat and process the metals. These materials are generally not stored in any one specific area. Parker-Amchem does not produce any products; therefore, there is no product storage area.

The facility has operated at its current location since 1971 and employs 302 people. The facility consists of one large building, with parking on the north and east sides. The building occupies approximately 150,000 square feet. There are only pilot-scale production lines at the facility. Research laboratories occupy the northern end of the facility, and pilot plants are on the east side. Chemicals are not used in the equipment engineering or general offices. Equipment



SCALE 1:24000



SCALE 1"=2,000'

PARKER-AMCHEM
MADISON HEIGHTS, MICHIGAN

FIGURE 1
FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

SOURCE: MODIFIED FROM USGS, 1980 AND 1981

engineering offices occupy the building's southern portion. General offices are on the building's west side.

The research and development laboratories generate small quantities of a various waste chemicals. These are disposed of in lab pack containers. Aqueous wastes from the laboratories are sent to the Wastewater Treatment System (WWTS) (SWMU 2). Water from SWMU 2 is discharged to a city sewer and containers of nonhazardous filter press sludge are transferred to the Hazardous Waste Storage Shed (SWMU 1) container storage area (CSA). The facility also has a Waste Paint Storage Area (SWMU 4) for paint-related waste and a Nonhazardous Waste Storage (SWMU 5) for oils and lubricants. The facility had an Indoor Hazardous Waste Storage Pad (SWMU 3) which is inactive. SWMU's 1 and 3 were used for greater than 90-day storage in the past, but currently store waste for less than 90 days. The Wash Water Storage Area (SWMU 6) was temporarily holding wash water from the closure of SWMU 1. The facility had a 12,000-gallon underground storage tank (UST) for fuel oil. According to the facility representative, the UST was never used. The UST was removed 1 to 1.5 years ago. This UST never managed solid waste. Facility SWMUs are identified in Table 1. The facility layout, including SWMUs, is shown in Figure 2.

Operations at the facility have been the same since 1971. Before 1971, the facility was occupied by an engineering firm. Prior to 1978, the southern half of the facility was leased to Gulf and Western Energy Development Associates (Gulf and Western). Gulf and Western conducted research on batteries for automotive and hydroelectrical use (Beyer, 1992). The facility's ownership and name have changed several times since 1971. When research and development operations began, the facility was known as Parker Rust Proof Company and was owned by Hooker Chemical (Hooker). Hooker changed the name of the facility several times. Sometime prior to 1980, the facility was purchased by Oxy Metal Industries Corporation (Oxy Metal) who named the facility Parker Division. Oxy Metal merged with Occidental Chemical Corporation and changed the facility's name several times until Ford Motor Company (Ford) became the owner in 1983. Ford called the facility Parker Chemical Company. Henkel purchased the business in 1987, combining Parker and its Amchem division. The facility is now called Parker + Amchem Henkel Corporation. Oxy Metal submitted the facility's first notification of hazardous waste activity on August 14, 1980 and was assigned the EPA identification number MID 057 676 124.

2.3 WASTE GENERATING PROCESSES

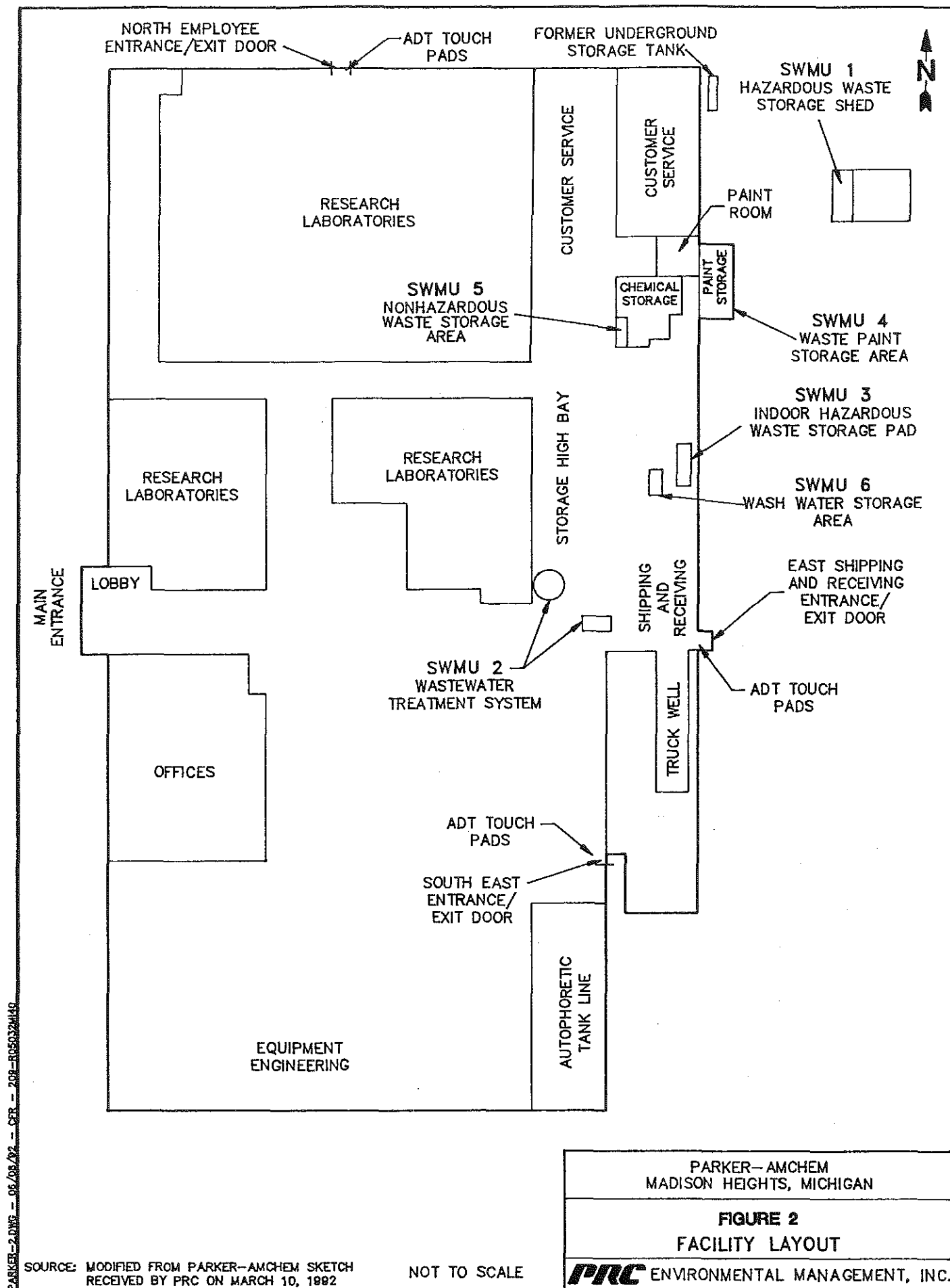
The primary waste streams generated at the Parker-Amchem facility are waste mineral spirits (F003, F004, and F005), waste water-based paint (D006), lab packs (generally D001, D002,

TABLE 1
SOLID WASTE MANAGEMENT UNITS (SWMU)

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
1	Hazardous Waste Storage Shed	Yes	Active, currently used for less than 90-day storage, RCRA- closure approval is pending
2	Wastewater Treatment System	No	Active, discharge permitted by City of Detroit
3	Indoor Hazardous Waste Storage Pad	Yes	Closed, RCRA- closure approval is pending
4	Waste Paint Storage Area	No	Active, currently used for less than 90-day storage
5	Nonhazardous Waste Storage Area	No	Active, currently used for storage of nonhazardous waste oils and lubricant
6	Wash Water Storage Area	No	Active at time of inspection, temporary storage of wash water generated during RCRA-closure of SWMU 1, wash water was discharged to the on-site WWTS after the VSI

Note:

* A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



PARKER-2.DWG - 08/08/92 - CTR - 208-R05032M40

SOURCE: MODIFIED FROM PARKER-AMCHEM SKETCH
RECEIVED BY PRC ON MARCH 10, 1992

NOT TO SCALE

D007, D009, and U080²), and nonhazardous filter press sludge, waste water, wash water, heat transfer oil, waste oil, lubricants, and oil emulsion. These wastes are generated during research and development activities. The wash water was generated during closure activities associated with the Hazardous Waste Storage Shed (SWMU 1), and was disposed of subsequent to PRC's inspection. Wastes generated at the facility are discussed below and are summarized in Table 2. Annual generation rates presented are based on 1991 waste generation data.

Operations in the paint room generate waste paint (D006) and waste mineral spirits (F003, F004, F005). This waste is accumulated in the Waste Paint Storage Area (SWMU 4), and may be transferred to the Hazardous Waste Storage Shed (SWMU 1), for less-than-90-day storage, as shown in Figure 2. About 110 gallons of waste paint and 550 gallons of waste mineral spirits are generated annually. Both of these wastes are transported off site to Petrochem Processors by Great Lakes Environmental Services. Both of these wastes are fuel blended by Petrochem Processing.

Operations in various laboratories and pilot-scale production line areas generate small quantities of various waste chemical compounds. Generally, these are unused chemical reagents that are not expected to be used in the future. General waste codes for these chemicals are listed in Table 2. These waste chemical compounds are moved to a designated location within the facility on a quarterly basis. Waste chemicals with similar properties are packed in 30- or 55-gallon drums and are typically shipped on the same day as accumulation and packing. The area to which waste chemical compounds are moved and packed is not a SWMU. If lab packs are not shipped on the same day, they are transferred to the Hazardous Waste Storage Shed (SWMU 1) for less than 90-day storage.

The laboratories and pilot-scale production lines generate waste water that is treated in the WWTS, SWMU 2. SWMU 2 generates nonhazardous filter press sludge and treated water. Toxicity Characteristic Leaching Procedure analysis conducted in March, 1992, documents that the filter press sludge is nonhazardous (Analytic and Biological Laboratories, 1992). Filter press sludge is stored in containers in the Hazardous Waste Storage Shed (SWMU 1). About 1,952,700 pounds of sludge is generated annually. This waste is transported to Chem Met Services by Great Lakes Environmental Services. The filter press sludge is mixed with cement dust prior to land disposal. Treated water from SWMU 2 is discharged to a city storm sewer that leads to the

² The most current (1988) Part A permit application listed the following waste codes: F001, F003, U002, U057, U117, F005, U154, D002, D007, D003, P030, P119, U013, U044, U056, U122, U123, U134, U162, U188, U209, U213, U219, and D001.

TABLE 2
SOLID WASTES

<u>Waste/EPA Waste Code</u>	<u>Source</u>	<u>Primary Management Unit*</u>
Waste mineral spirits (solvents)/ F003, F004, F005	Parts cleaning	4
Water-based paint/D006	Metal painting	4
Lab packs/Generally D001, D002, D007, D009, U080**	Laboratories	1 and 3
Filter press sludge/NA***	WWTS	1 and 3
Wastewater/NA	WWTS	2
Wash water/NA	Decontamination of SWMU 1	6
Heat transfer oil/NA	Heat transfer system	5
Waste oil/NA	Metal stamping	5
Lubricants/NA	Metal stamping	5
Oil emulsion/NA	Metal stamping	5

Notes:

- * Primary management unit refers to a SWMU that currently manages or formerly managed the waste.
 - ** Section 2.5 lists all of the waste codes that may be included in lab packs.
 - *** Nonapplicable (NA) designates nonhazardous waste.
-

twelve-town drain and is ultimately treated at a City of Detroit publicly-owned treatment works. About 19,000 gallons of water are discharged each day.

The Parker-Amchem facility also generates nonhazardous heat transfer oil, waste oil, lubricants, and oil emulsion. This waste is accumulated in the stockroom, SWMU 5. About 5,500 gallons of various oils and lubricants are generated annually. These wastes are transported off site to Chem Met by Great Lakes Environmental Services. Chem Met mixes these wastes with cement dust before land disposal.

In the past, the Indoor Hazardous Waste Storage Pad (SWMU 3), was used to store hazardous and nonhazardous wastes generated by the processes previously discussed. SWMU 3's operations were similar to those of the Hazardous Waste Storage Shed (SWMU 1).

Wash water generated during decontamination associated with RCRA-closure of the Hazardous Waste Storage Shed (SWMU 1) was temporarily being stored in 55-gallon drums on a concrete floor area adjacent to the Indoor Hazardous Waste Storage Pad (SWMU 3) at the time of the VSI. About 385 gallons of wash water was being held indoors at the time of VSI (see Photo No. 7). The wash water was treated in the WWTS (SWMU 2) subsequent to the VSI.

2.4 HISTORY OF DOCUMENTED RELEASES

This section discusses the history of documented releases to ground water, surface water, air, and on-site soils, at the Parker-Amchem facility. The remediation plan for the Hazardous Waste Storage Shed (SWMU 1) stated that contamination was found in two of three soil borings drilled through the shed's concrete floor. These soil borings showed chromium contamination [at 54 milligrams per kilogram (mg/kg)], xylene (at 30 mg/kg), and ethylbenzene (at 4 mg/kg). All levels were above background. Contamination was found between 0 to 4 feet below ground surface. The borings were taken at the location of large cracks in the concrete floor. Contamination probably occurred when chemicals seeped through the cracks (Dragun, 1990).

The cleanup criteria at the Hazardous Waste Storage Shed (SWMU 1) were derived from the MDNR Public Act 307 as proposed June 22, 1990. The cleanup utilized MDNR Type B cleanup standards. The approved closure plan stated that contaminated soil would be removed, temporarily stored on site, characterized, and then disposed at a licensed disposal facility. The plan stated that the excavation would be backfilled with clean fill and new concrete would be poured to restore the floor. The plan stated that clean closure samples would be collected from the floor and walls of the excavation. These samples would undergo analysis prior to backfilling the excavation tested before backfilling (Dragun, 1990).

Closure activities of the Hazardous Waste Storage Shed (SWMU 1) occurred during the winter of 1992. Parker-Amchem submitted SWMU 1's closure certification report to MDNR in May, 1992 (Beyer, 1992). At the time of the VSI, Parker-Amchem had not received closure approval from MDNR.

2.5 REGULATORY HISTORY

Oxy Metal Industries Corporation (Oxy Metal) Parker Division, submitted a notification of hazardous waste activity to EPA on August 14, 1980 (Oxy Metal, 1980a), and was assigned EPA identification number MID 057 676 124. The original RCRA Part A permit application was submitted on November 18, 1980 by Parker Division, Occidental Chemical Corporation (Oxy Metal, 1980b). It appears that Oxy Metal and Occidental Chemical merged some time between submittal of the notification and Part A permit application. This Part A permit application listed the following process codes and capacities: S01 (11,770 gallons), T01 (19,000 gallons per day), S02 (7,500 gallons). The S01 code referred to the Hazardous Waste Storage Shed (SWMU 1) and the Indoor Hazardous Waste Storage Pad (SWMU 3). The T01 and S02 codes referred to the WWTs (SWMU 2). The application listed the following wastes: F001, U226, F003, U002, U057, U117, U239, F005, U154, U159, U220, P022, D002, D007, D003, P030, P102, P119, U013, U019, U032, U044, U056, U118, U122, U123, U134, U162, U167, U169, U188, U202, U209, U213, U219, and D001.

A second Part A permit application was submitted by Parker Chemical Company on September 28, 1983 (Parker Chemical Company, 1983) because of the change of ownership from Occidental Chemical Corporation to Ford Motor Company. This second application did not list the T01 process code but did list the same wastes. A third Part A permit application was submitted by Parker-Amchem on May 11, 1988 (Parker-Amchem, 1988a). This new application was the result of the change in site ownership from Ford Motor Company to Henkel Corporation during 1987. This application listed the S01 process codes capacity as 1,700 gallons. The capacity of S02 remained the same. The following waste codes previously listed on the original Part A permit application were not listed on the third application: U226, U239, U159, U220, P022, P102, U019, U032, U118, U167, U169, and U202. According to the facility representative, the capacity of S01 was reduced because of the facility's plan to close the Hazardous Waste Storage Shed (SWMU 1). The EPA identification number for the facility remained MID 057 676 124 through the ownership and name changes.

Parker-Amchem submitted a revised RCRA-closure plan for the Hazardous Waste Storage Shed (SWMU 1) and the Indoor Hazardous Waste Storage Pad (SWMU 3) in May, 1990. In June,

1990, MDNR approved the revised closure plan for SWMUs 1 and 3. MDNR's approval letter also stated that SWMU 3 was inspected on March 8, 1990, by MDNR and that closure activities already performed at this unit satisfied the formal closure requirements (MDNR, 1990b). No other closure activities were required for SWMU 3. PRC did not find a formal closure approval for SWMU 3.

Closure of the WWTS (SWMU 2), was not conducted because the unit was not subject to RCRA regulations. SWMU 2 is regulated under a Detroit Water and Sewerage Department Wastewater Discharge Permit. The PA/VSI revealed that Parker-Amchem had no history of noncompliance with the permit. SWMU 2 was erroneously included on the original Part A permit application, and the S02 process code for tanks associated with SWMU 2 was erroneously included on the subsequent permit application (Parker-Amchem, 1988b).

Closure activities at the Hazardous Waste Storage Shed (SWMU 1) are complete. Approval of SWMU 1 closure should include approval of the closure of SWMU 3. The facility currently operates as a large-quantity generator storing wastes for less than 90 days.

In the past, Parker-Amchem has had RCRA compliance problems. The violations, observed during a series of MDNR inspections, which took place from 1982 through 1991, pertained mainly to deficiencies with recordkeeping, such as training records, inspection logs, contingency plans, and land disposal restrictions. Operating deficiencies included inadequate aisle space, drum labeling, and open containers (MDNR 1982, 1984, 1987, 1989, 1990b, and 1991a). No orders were issued as a result of the inspections. No outstanding violations remain (MDNR, 1988 and 1991b).

The facility is not required to have operating air permits. At the time of the VSI, the facility representative stated that Parker-Amchem was exempt from air permit requirements because it is a research and development facility. The facility has no history of odor complaints from area residents.

At the time of the VSI, the facility was not required to have a National Pollutant Discharge Elimination System (NPDES) permit. Treated wastewater from the WWTS (SWMU 2) is discharged in accordance with a permit from the Detroit Water and Sewerage Department.

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the Parker-Amchem facility.

2.6.1 Climate

The climate in Oakland County is temperate. The average daily temperature is 48°F. The lowest average daily temperature is 15°F in January. The highest average daily temperature is 83°F in July (NOAA, 1990).

The average total annual precipitation for the county is 29.6 inches (Feenstra, 1982). The average total evaporation from April through October for the area is about 43 inches (Larson, 1971). The 1-year, 24-hour maximum rainfall is 6.7 inches in June 1968 (Feenstra, 1982).

The prevailing wind is from the southwest. Average wind speed is highest in March at 12 miles per hour from the southwest (Larson, 1971).

Average seasonal snowfall is 34.6 inches. The greatest snow depth at any one time during the period of record was 28 inches. On an average of 60 days per season, at least 1 inch of snow is on the ground. The average relative humidity in midafternoon is about 60 percent. Humidity is higher at night. The sun shines 67 percent of the time possible in summer and 38 percent in winter (Feenstra, 1982).

2.6.2 Flood Plain and Surface Water

The Parker-Amchem facility is not located in a flood-prone area (Federal Emergency Management Agency, 1990). The nearest surface water body is an unnamed intermittent stream located 2,000 feet west of the facility. This stream is used for area drainage. It discharges to storm sewers that combine with sanitary sewers which eventually discharge to a municipal wastewater treatment plant (Melchert, 1992).

The facility is relatively level, thus surface water drainage from the facility is probably minimal. Storm water runoff discharges to on-site storm sewers. All of the storm sewers at the facility discharge to the twelve-town drain and are treated at a City of Detroit publicly-owned treatment works.

2.6.3 Geology and Soils

Soils around the Parker-Amchem facility are part of the Urban Land-Blount-Lenawee association. The association is about 65 percent Urban land, 20 percent Blount soils, 10 percent Lenawee soils, and 5 percent other soils.

Urban land around the facility is covered by streets, sidewalks, driveways, parking lots, houses, and other structures that so obscure or alter the soil that identifying it is not feasible. The Blount soils are nearly level and gently undulating. They are also somewhat poorly drained. The surface layer is dark gray loam about 7 inches thick. The mottled subsoil is about 23 inches thick. In the upper part the soil is brown, firm silty clay loam. In the lower part, the soil is grayish brown, very firm clay. To a depth of 60 inches, the substratum is brown, mottled, calcareous silty clay loam. The Lenawee soils are nearly level and are poorly drained. The surface layer is dark gray silty clay loam about 8 inches thick. The mottled subsoil is about 45 inches thick. In the upper part the soil is dark gray, firm silty clay loam; in the middle part the soil is gray, very firm silty clay; and in the lower part it is gray, very firm silty clay loam. To a depth of 60 inches, the substratum is light yellowish brown, mottled, calcareous silty clay loam (Feenstra, 1982).

Bedrock in the area of Parker-Amchem is of the lower Mississippian series, which formed during the Paleozoic era. The primary formations are the Coldwater Shale, Marshall Sandstone, Michigan Formation, and Bayport Limestone. Coldwater Shale is a gray, micaceous shale that is more than 1,250 feet thick along the eastern margin of lower Michigan. Cold water shales are not aquifers, but could be a confining layer, except in the eastern part of the state where sandstones are present. Marshall Sandstone comprises 160 to 320 feet of sandstone, siltstone, and shale. The sandstones are composed of well-sorted, fine-to-medium-grained dominantly quartz sandstone. The Marshall Sandstone is too permeable to act as a confining layer (Western Michigan University, 1981).

The Michigan Formation is a sequence of dark gray shale, limestone, dolomite, sandstone, gypsum, and anhydrite. This formation is not known to be an aquifer. The ability of this formation to act as a confining layer varies depending on the components found in the sequence. Bayport Limestone is a dense, cherty, anhydritic dolomite with interbeds of quartz sandstone at its base. The middle portion consists of fossiliferous limestone that grades upward through shaly limestone to dolomite and limestone. Bayport Limestone does not act as a confining layer because of the presence of sandstone beds and dolomite (Western Michigan University, 1981).

2.6.4 Ground Water

Information on ground water specific to the site was not available, thus regional hydrogeology is presented below.

The regional hydrogeology consists of the Mississippi aquifer system. This system consists of the Berea Sandstone (in southeastern Michigan), the sandstones of the Coldwater Shale, Marshall Sandstone and Michigan Formation, and the Bayport Limestone (in west-central Southern Peninsula). The formations dip and thicken toward the center of the basin. Researchers have, at various times, separated the Mississippian sandstones into the Coldwater, Marshall and Michigan Formations. Certainly there is evidence to suggest that hydraulic continuity exists between the sandstones in these three units (Western Michigan University, 1981).

The aquifer system generally consists of sandstone with some shale and siltstone, except for the Bayport Limestone, which consists of large erosional remnants of limestone and sandstone. The aquifer system is most productive where it underlies and is in hydraulic continuity with the glacial drift, and decreases in productivity and quality where it is overlain by other bedrock formations. The sandstones are generally water-bearing. The Mississippian aquifer system is one of the most important and productive aquifers in Michigan. The aquifer system is generally in hydraulic continuity with the drift aquifer in the area where it is overlain by the drift. The aquifer system is further enhanced by naturally induced recharge from surface water bodies. Good quality water is produced throughout the outcrop and subcrop areas of the Mississippian aquifer system, but brines are produced in the central basin area. Saline water production is also reported in west-central Michigan (Western Michigan University, 1981).

2.7 RECEPTORS

The Parker-Amchem facility occupies approximately 9 acres in a mixed-use area in Madison Heights, Michigan. Madison Heights has a population of about 32,196 (Melchert, 1992).

The Parker-Amchem facility is bordered on the north by a hotel, on the west by small businesses, and on the south and east by industrial facilities. The nearest school, Bishop Foley High School, is located less than 0.25 mile west of the facility. Facility access is controlled by locked doors. The locking mechanism can only be opened by using an access code. After hours, the facility is patrolled by a security guard.

The nearest surface water body is an unnamed intermittent stream located 2,000 feet west of the facility. This stream is used for area drainage. The stream flows to storm sewers. Other surface water bodies in the area include Spencer Drain and Lawson Drain. These begin approximately 0.75 mile north and south of the facility, respectively. Spencer Drain flows into Big Beaver Creek. Lawson Drain and Big Beaver Creek flow into the Red Run River.

Ground water is not used as a drinking water supply for the majority of Madison Heights. The nearest drinking water wells are located in a residential area 1 mile southeast of the facility. Approximately 10 to 20 homes in this area have private wells. There are no industrial wells in Madison Heights (Melchert, 1992).

Sensitive environments are not located on site. The nearest wetland area is located less than 1 mile southeast of the facility near the location of the residential wells (National Wetlands Inventory, 1978).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the six SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and PRC observations.

SWMU 1

Hazardous Waste Storage Shed

Unit Description:

The Hazardous Waste Storage Shed is part of a large shed located in the northeast corner of the facility's property. The unit is for less than 90-day storage of hazardous waste in containers. This unit may store 55-gallon containers of paint-related wastes and 55- and 30-gallon lab pack containers, which contain small quantities of excess laboratory chemicals. Nonhazardous wastes that are stored in this area include filter press sludge, heat transfer oil, waste oil, lubricants, and oil emulsion. The waste management area measures 37 feet by 32 feet, and is part of a large shed measuring 37 feet by 80 feet. The waste management area is separated from the rest of the shed by a wall, that has a door, and by diking. The maximum capacity of this SWMU area is 195 drums. The unit is completely enclosed by galvanized metal walls and roof. The floor is diked and made of concrete (see Photographs No. 1 and 2). There are no floor drains in this area.

Date of Startup:

This unit began operation in 1972. The shed was in place when Parker-Amchem began operations at the facility.

Date of Closure:

The unit has not stored wastes on a greater-than-90-day basis since October 1988. RCRA closure activities occurred during the winter of 1992, but the facility has not yet received closure approval for this unit. The unit is now an active generator SWMU, storing wastes on a less-than-90-day basis.

Wastes Managed:

This unit manages containers for less than 90 days. The hazardous wastes stored at this SWMU may include lab packs (with many EPA waste codes), waste water-based paint (D006), and paint waste solvent (F008, F004, F005). Lab packs from this unit are ultimately removed and disposed of by rolling Chemical Packing of

Livonia, Michigan. This SWMU also manages nonhazardous wastes, including waste oils, lubricants, and filter press sludge. These wastes are picked up by Great Lakes Environmental Services for disposal by Chem Met Services.

Release Controls:

This SWMU has a 6-inch concrete berm, metal walls, roof, and a concrete floor. As part of closure, portions of the concrete floor were decontaminated then removed; soil was excavated and sampled from beneath these areas to a depth of 4 to 5 feet, then the concrete was replaced and all cracks were sealed. All closure activities specified in the approved closure plan are complete. The facility is awaiting final closure approval from MDNR.

History of Documented Releases:

The following releases have been documented: Parker-Amchem's remediation plan indicates that chromium (at 54 mg/kg), xylene (at 30 mg/kg), and ethyl benzene (at 4 mg/kg) were found between 0 to 4 feet below floor cracks (in two soil borings). These levels were above background. The plan states that "contamination may have occurred from minor seepage of residue into the soils" (Dragun, 1990).

Observations:

The unit contained 20, 55-gallon drums of filter press sludge (nonhazardous), six 55-gallon drums of heat transfer oil (nonhazardous), and 16, unlabeled drums (contents unknown) during the VSI. The facility representative was unable to identify the contents of the unlabeled drums at the time of VSI. All cracks in the floor and in the corners of the dike were sealed. PRC did not observe any open drums. PRC observed rainwater entering the SWMU at the doorway and from the northern wall. No evidence of release was noted. PRC did not observe any drums labeled as containing hazardous waste. PRC noted that the shed is locked when drums are not being moved into or out of the shed.

SWMU 2

Wastewater Treatment System (WWTS)

Unit Description:

The WWTS is located indoors near the shipping and receiving area. The unit treats water from all laboratories and the customer service

areas. Wastewater from the labs is piped to the WWTS. Wastewater from customer service areas goes through concrete trenches to the WWTS sump. Facility waste water drains to the WWTS; there are no pumps. The unit has a 7,500-gallon sump to collect wastewater. From the sump, water goes to two, 15,000-gallon aboveground, spun polyvinyl holding tanks. Wastewater then goes through a series of tanks for (1) chromium reduction, (2) primary pH adjustment, (3) secondary pH adjustment, and finally (4) chemical flocculation and separation. The removed solids are the nonhazardous filter press sludge. Treated water is discharged to the city sewer system (see Photographs No. 3, 4, and 5).

Date of Startup: This unit originally began operation in 1971 but was upgraded in 1989. The capacity of the system was increased due to the merger of Parker and Amchem which created additional research operations at the facility. At that time, a polyvinyl tank was put in the cement holding sump. The polyvinyl tank now serves as the primary holding tank. The new treatment process is essentially the same as the original process.

Date of Closure: The unit is active and is not a RCRA-regulated unit.

Wastes Managed: This unit manages wastewater from the research and development laboratories and from the customer service department. Water from this unit is ultimately discharged to the City of Detroit sewer system under a permit. Nonhazardous filter press sludge is placed in 55-gallon containers and transferred to the Hazardous Waste Storage Shed (SWMU 1).

Release Controls: The original concrete sump acts as a secondary containment for the polyvinyl tank. Other polyvinyl holding tanks are on grating above the sump or have 4-inch diking around them. The WWTS controls releases from other portions of the facility, since floor drains lead to the WWTS. The system has automatic controls to stop or recycle the waste water at each stage of the treatment and at the final discharge.

History of Documented Releases:

No releases from this SWMU have been documented.

Observations:

The unit contained wastewater in various stages of treatment during the VSI. The discharge rate for the unit is approximately 19,000 gallons per day. PRC did not observe any cracks in the unit's floor. Wastewater was contained in pipes or the treatment tanks. The drum used accumulate for filter press sludge was closed. No evidence of release was noted.

SWMU 3

Indoor Hazardous Waste Storage Pad

Unit Description:

The Indoor Hazardous Waste Storage Pad is located indoors just north of the shipping and receiving area. The unit was used to store drums of hazardous and nonhazardous wastes generated at the facility. The unit measured approximately 10 feet by 32 feet. The unit is made of concrete block walls and a concrete floor. The area was designated by floor markings (see Photograph No. 6). PRC did not observe any floor drains in the area.

Date of Startup:

This unit began operation in 1981.

Date of Closure:

On March 8, 1990, MDNR visited the Parker-Amchem facility and met with facility personnel regarding closure of SWMUs 1 and 3. At that time, the Indoor Hazardous Waste Storage Pad was inspected. MDNR determined that closure activities already performed at SWMU 3 satisfied the formal closure requirements. No additional closure activities were required. Formal closure approval will be granted along with approval for closure of SWMU 1 (MDNR, 1990a). PRC was unable to locate a record showing what activities were performed as part of SWMU 3's closure.

Wastes Managed:

This unit managed lab packs, waste oils, lubricants, and filter press sludge in drums. Wastes from this unit were ultimately managed as the wastes in SWMU 1 are managed.

Release Controls: PRC did not observe any release controls. The unit consisted of an area of concrete floor marked by painted lines.

History of Documented Releases: No releases from this SWMU have been documented.

Observations: At the time of the VSI, the unit contained planks of wood stored on brackets. No evidence of release was noted. No drums or waste were present.

SWMU 4 Waste Paint Storage Area

Unit Description: The Waste Paint Storage Area is located indoors in the northeast corner of the facility. The unit is a satellite accumulation area for waste paint and paint solvent wastes. The unit occupies 5 feet by 10 feet of a larger room. The room is also used to store paint and paint-related supplies. The room is made of concrete block walls and a concrete floor. The exterior east wall has a window that is constructed such that it will collapse in the event of an explosion. The concrete floor did not appear to be epoxy-sealed (see Photographs No. 7 and 8). PRC did not note any floor drains in this area. The door to this unit is kept closed.

Date of Startup: This unit began operation 1971.

Date of Closure: The unit is active.

Wastes Managed: This unit accumulates containers of waste paint (D006) and paint solvent waste (F003, F004, F005). Wastes from this unit are ultimately picked up by Great Lakes Environmental and transported to Petrochem for recycling. Wastes are either picked up directly from this unit or are transferred to the Hazardous Waste Storage Shed (SWMU 1) for less than 90-day storage prior to pickup.

Release Controls: The unit has no release controls for drums stored in this unit.

History of Documented Releases:

No releases from this SWMU have been documented.

Observations:

The unit contained one, 55-gallon steel drum each for the accumulation of paint waste and paint solvent (mineral spirits). PRC did not observe any floor cracks. Open drums of waste were present. The area was cluttered with boxes, and waste drum labels were not always clear. The waste drums were not segregated from product drums, which also were not clearly labeled. Splashes of paint were observed on the floor and walls. PRC also noted a strong solvent odor in the area.

SWMU 5

Nonhazardous Waste Storage Area

Unit Description:

The Nonhazardous Waste Storage Area is located in the chemical storage area inside the facility. The area stores laboratory chemicals, glassware, and related apparatus. A portion of the chemical storage area is used to accumulate nonhazardous waste oil, lubricants, heat transfer oil, and oil emulsion. The waste management area of the stockroom measures approximately 3 feet by 10 feet and has the capacity for four 55-gallon drums. The room is made of concrete block walls and a concrete floor. PRC did not note any sealing material on the floor, any cracks, or any floor drains (see Photograph No. 9). The entire chemical storage area is fenced in and has a locked gate.

Date of Startup:

This unit began operation in the mid-1980's.

Date of Closure:

The unit is active.

Wastes Managed:

This unit manages nonhazardous waste oil, lubricants, heat transfer oil, and oil emulsion in container. Wastes from this unit may be transferred to the Hazardous Waste Storage Shed (SWMU 1) where they are ultimately picked up by Great Lakes Environmental and disposed of by Chem Met. The wastes may be picked up directly from the Nonhazardous Waste Storage Area.

Release Controls:	The unit has no release controls. Access to this area is limited. The area is enclosed by a wire fence that is locked.
History of Documented Releases:	No releases from this SWMU have been documented.
Observations:	The unit contained one, 55-gallon drum of each of the following during the VSI: heat transfer oil, oil emulsion, waste oil, and lubricant. No evidence of release was noted.
SWMU 6	Wash Water Storage Area
Unit Description:	At the time of the VSI, the Wash Water Storage Area was located across the aisle from the Indoor Hazardous Waste Storage Area (SWMU 3). The unit was storing wash water generated from floor cleaning associated with the closure of the Hazardous Waste Storage Shed (SWMU 1). Seven, 55-gallon drums were observed on wooden pallets. The unit measured the area of three wood pallets, about 15 square feet. The pallets were stored on a concrete floor. PRC did not observe any floor drains in the area. PRC did observe a crack in the floor (see Photograph No. 10).
Date of Startup:	This unit began operation in approximately February 1992.
Date of Closure:	The unit was active at the time of the inspection, but is now nonexistent.
Wastes Managed:	This unit managed wash water generated during closure activities at the Hazardous Waste Storage Shed (SWMU 1). At the time of the VSI, the facility representative stated that wastes from this SWMU would ultimately be treated in the facility's WWTS pending receipt analytical results. Two to three drums of the wash water were sampled as part of the closure plan; analytical results were not available at the time of inspection. The wash water was disposed of in June 1992 in the WWTS.
Release Controls:	The unit has no release controls.

History of Documented
Releases:

No releases from this SWMU have been documented.

Observations:

The unit contained seven, 55-gallon drums of wash water. The drums were stored closed and were labeled "H₂O". Rust was evident on some of the drums. No evidence of release was noted.

4.0 AREAS OF CONCERN

PRC identified no AOCs during the PA/VSL.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified six SWMUs and no AOCs at the Parker-Amchem facility. Background information on the facility's location, operations, waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0. Following are PRC's conclusions and recommendations for each SWMU and AOC. Table 3 summarizes the SWMUs at the Parker-Amchem facility and recommended further actions.

SWMU 1 Outdoor Hazardous Waste Storage Shed

Conclusions: Closure activities at SWMU 1 have been completed. The facility is waiting closure approval. Wastes are now stored for less than 90 days. The potential for release to environmental media is detailed below.

Ground Water: Moderate. The potential for release to ground water is now low, since the SWMU has a diked concrete floor. Cracks in the floor have been sealed. A release to ground water from contaminated soils may have occurred before closure of the SWMU.

Surface Water: Low. The potential for release to surface water is low since drainage from this SWMU is prevented by diking.

Air: Low. PRC observed that drums of waste were stored closed. The potential for wind-borne contamination is low since the SWMU is completely enclosed.

On-Site Soils: This unit has had document soil contamination, as indicated in Parker-Amchem's closure plan. Soils were removed from beneath the SWMU's concrete floor. The future release potential is low based on the new, sealed concrete floor. However, PRC did not review a closure certificate stating all contaminated soils under this SWMU were excavated.

Recommendations: PRC recommends that Parker-Amchem label all drums accumulated in this SWMU. The facility should delineate areas within the SWMU for storage

ENFORCEMENT
CONFIDENTIAL

TABLE 3
SWMU SUMMARY

<u>SWMU</u>	<u>Dates of Operation</u>	<u>Evidence of Release</u>	<u>Recommended Further Action</u>
1. Outdoor Hazardous Waste Storage Shed	1971 to present	Contaminated soils removed from beneath concrete floor	Label all drums, separate hazardous waste, prevent rain water from entering
2. WWTS	1971 to present	None	None
3. Indoor Hazardous Waste Storage Pad	1971 to March 1990	None	Obtain written documentation of closure
4. Waste Paint Storage Area	1971 to present	None	Improve housekeeping, separate supplies from wastes, clearly label drums, and close drums tightly
5. Nonhazardous Waste Storage Area	Mid-1980s to present	None	None
6. Wash Water Storage Area	February 1992 to approximately June 1992	None	None, wash water was discharged to the on-site WWTS based on analytical results

RELEASED

DATE

RIN #

INITIALS

12/4/00
AV

of hazardous and nonhazardous waste. PRC also recommends that the space around the doors be sealed such that rainwater cannot enter the storage shed. Installation of monitoring wells outside of the SWMU could be used to assess past releases to ground water.

SWMU 2 Wastewater Treatment System

Conclusions: The WWTS treats water from the laboratories and customer service area. This SWMU is not an RCRA-regulated unit. The potential for release to environmental media is detailed below.

The unit has a low potential for release to ground water, surface water, air and on-site soils. Portions of the unit have either a concrete pad with a 4-inch dike or are on grating over secondary containment. The system is indoors, and all liquids are contained within piping, concrete trenches or closed tanks.

Recommendations: PRC recommends no further action for this SWMU.

SWMU 3 Indoor Hazardous Waste Storage Pad

Conclusions: This unit is inactive and is no longer used to store any type of waste. Informal closure approval was granted on March 8, 1990 (MDNR, 1990a). The potential for release to environmental media is detailed below.

The unit has a low potential for release to ground water, surface water, air, and on-site soils, as wastes are no longer stored here. The past potential for release to environmental media was probably low, because the unit was located indoors and stored closed drums on concrete. No sampling was conducted as part of the closure activities.

Recommendations: PRC recommends that the facility obtain written documentation of RCRA-closure approval.

RELEASED
DATE 12/1/00
RIN #
INITIALS WV

RELEASED
DATE 12/4/00
RIN #
INITIALS

ENFORCEMENT
CONFIDENTIAL

SWMU 4

Waste Paint Storage Area

Conclusions:

This unit accumulates paint waste and paint solvent. Construction of the unit includes a blow-out window that will collapse in the event of an explosion. The potential for release to environmental media is detailed below.

Ground Water: Low. Wastes are stored in drums on a concrete floor. No cracks were observed in the concrete, but the floor did not appear to be sealed. Spilled paint was observed on the floor.

Surface Water: Low. PRC did not observe any drains in this area or identify a pathway to surface water, making potential for release to surface water low.

Air: Moderate. PRC noted a strong solvent odor in this unit. The door to this area is typically kept closed but does open to an outdoor area. Access to the unit through the adjacent outdoor area is limited by plastic wall and roof panels.

On-Site Soils: Low. Staining and paint splashes were evident on the floor and walls of this unit. The unit's walls and floors are concrete.

Recommendations:

General housekeeping in this unit should be improved. The facility should segregate supplies from wastes and nonhazardous wastes from hazardous wastes. The facility should ensure that all drums are clearly labeled and tightly closed.

SWMU 5

Nonhazardous Waste Storage Area

Conclusions:

This indoor unit stores laboratory supplies and the waste management portion stores nonhazardous waste oils and lubricants in drums. Access to the stockroom is limited by a fence and locked gate. The potential for release to environmental media is detailed below.

The unit has a low potential for release to ground water, surface water, air, and on-site soils. The unit is indoors on a concrete floor. The drums appeared to be in good condition with no evidence of leaks or corrosion.

ENFORCEMENT
CONFIDENTIAL

Recommendations: PRC recommends no further action for this SWMU.

SWMU 6 Wash Water Storage Area

Conclusions: Seven drums of wash water generated during decontamination associated with the closure of the Hazardous Waste Storage Shed (SWMU 1) were stored on pallets near the Indoor Hazardous Waste Storage Pad (SWMU 3) at the time of the inspection. The unit stored closed drums, indoors on wooden pallets on a concrete floor. During the VSI, the facility representative stated that the wash water would be treated in the facility's WWTS (SWMU 2) after receipt of analytical results. The potential for release to environmental media is detailed below.

The unit had a low potential for release to ground water, surface water, air, and on-site soils. At the time of the inspection, the drums were stored indoors and were in good condition. The wash water contained low levels of contaminants and subsequent to the VSI, the wash water was disposed of in the facility's WWTS (SWMU2) (Beyer, 1992). SWMU 6 is now inactive.

Recommendations: None.

RELEASED
DATE 12/4/00
RIN #
INITIALS aw

REFERENCES

- Analytic and Biological Laboratories, Inc., 1992. Results of filter press sludge analysis, March 10.
- Beyer, George, 1992. Parker-Amchem, Telephone conversation with Judy Wagner, PRC Environmental Management, Inc., (PRC), May 29.
- The Dragun Corporation (Dragun), 1990. Remediation Plan Parker-Amchem Corporation, December 9.
- Federal Emergency Management Agency, 1990. Federal Insurance Administration, Communities Participating in the National Flood Insurance Program, Michigan, April 30.
- Feenstra, James E., 1982. Soil Survey of Oakland County, Michigan, U.S. Department of Agriculture, Soil Conservation Service, March.
- Larson, Richard L., 1971. Soil Survey of Macomb County, Michigan, U.S. Department of Agriculture, Soil Conservation Service, September.
- Melchert, Ron, 1992. Madison Heights Water & Sewer Division, Telephone conversation with Judy Wagner, PRC, April 27.
- Michigan Department of Natural Resources (MDNR), 1982. Larry AuBuchon, MDNR, Letter to George Beyer, Occidental Chemical Corporation, June 17.
- MDNR, 1984. Laura Lodisio, MDNR, Letter to George Beyer, Parker Chemical Company, May 31.
- MDNR, 1987. Faye Dade, MDNR, Letter to George Beyer, Parker Chemical Company, May 20.
- MDNR, 1988. Letter from Faye Mitchell, Environmental Quality Analyst (EQA), to George Beyer, Parker-Amchem, May 12.
- MDNR, 1989. Faye Mitchell, EQA, Letter to George Beyer, Parker-Amchem, March 16.
- MDNR, 1990a. Alan Howard, Chief, Closure Plan Approval Hazardous Waste Container Storage Areas to Parker-Amchem, June 21.
- MDNR, 1990b. Letter from Donald Mbamah, EQA, to George Beyer, Parker-Amchem, March 12.
- MDNR, 1991a. Letter from Donald Mbamah, EQA, to George Beyer, Parker-Amchem, March 7.
- MDNR, 1991b. Letter from Thomas Sampson, EQA, to George Beyer, Parker-Amchem, August 30.
- National Oceanic & Atmospheric Administration, 1990. Local Climatological Data, Annual Summary for Detroit Metro Airport, Michigan, National Climatic Data Center, Ashville, North Carolina.
- National Wetlands Inventory, 1978. U.S. Department of the Interior, Fish and Wildlife Service, Highland Park, Michigan, November.

Oxy Metal Industries Corporation, Parker Division (Oxy Metal), 1980a. Notification of Hazardous Waste Activity, August 14.

Oxy Metal, 1980b. Hazardous Waste Permit Application, November 18.

Parker + Amchem Henkel Corporation (Parker-Amchem), 1988a. Hazardous Waste Permit Application, May 11.

Parker-Amchem, 1988b. Roger Walker, Director of Operations, Letter to MDNR regarding withdrawal of Part A permit application, July 6.

Parker Chemical Company, 1983. Hazardous Waste Permit Application to EPA, September 28.

United States Geological Survey (USGS), 1980. Warren Quadrangle Topographic Map.

USGS, 1981. Birmingham Quadrangle Topographic Map.

Western Michigan University, 1981. Hydrogeology for Underground Injection Control in Michigan: Part 1, Department of Geology, Kalamazoo, Michigan.

ATTACHMENT A
VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

PARKER + AMCHEM HENKEL CORPORATION
MADISON HEIGHTS, MICHIGAN
MID 057 676 124

Date: March 10, 1992

Facility Representatives: George J. Beyer, Technical Manager

Inspection Team: Carla Buriks, PRC Environmental Management, Inc. (PRC)
Judy Wagner, PRC

Photographer: Judy Wagner, PRC

Weather Conditions: Windy, rain mixed with snow, temperature about 35°F

Summary of Activities: The visual site inspection (VSI) began at 8:15 a.m. with an introductory meeting. The inspection team discussed the purpose of the VSI and the agenda for the visit. Facility representatives then discussed the Parker-Amchem facility's past and current operations, solid wastes generated, and release history. Most of the information was exchanged on a question-and-answer basis. Parker-Amchem representatives provided the inspection team with copies of documents requested.

The VSI tour began at 9:20 a.m. PRC began the tour by briefly observing several laboratories, the high bay area, and the customer service area. In the last two areas, PRC observed dikes around pilot-scale production systems and associated floor trenches. PRC then observed the paint room and Waste Paint Storage Area (SWMU 4). Next, PRC viewed the Nonhazardous Waste Storage Area (SWMU 5) where nonhazardous wastes are stored. PRC then viewed the WWTS (SWMU 2) and the autophoretic research laboratories where there were environmental testing chambers. PRC observed the Indoor Hazardous Waste Storage Pad (SWMU 3), which is closed, and the Hazardous Waste Storage Pad (SWMU 1) which is undergoing closure. Both of the units are awaiting MDNR closure approval. PRC did not inspect each research laboratory or the business offices.

The tour concluded at 10:20 a.m., after which the inspection team held an exit meeting with George Beyer. The VSI was completed and the inspection team left the facility at 10:40 a.m.



Photograph No. 1

Orientation: North

Location: SWMU 1

Date: 03/10/92

Description: Inside the Hazardous Waste Storage Shed; nonhazardous wastes (filter press sludge and heat transfer oil) being stored; area is diked and cracks are sealed; some drums are not labeled.



Photograph No. 2

Orientation: West

Location: SWMU 1

Date: 03/10/92

Description: Inside the Hazardous Waste Storage Shed; photograph shows dikes, sealed cracks, and new cement; note rain water entering to the left of the door.



Photograph No. 3

Orientation: North

Description: Sump associated with the WWTs is located under the yellow grate.

Location: SWMU 2

Date: 03/10/92



Photograph No. 4

Orientation: North

Description: WWTs tanks are visible on the upper deck.

Location: SWMU 2

Date: 03/10/92



Photograph No. 5

Location: SWMU 2

Orientation: South

Date: 03/10/92

Description: Accumulation point for nonhazardous WWTs filter press sludge; water discharge pipe to city sewers is behind drum; diking is visible as well.



Photograph No. 6

Location: SWMU 3

Orientation: East

Date: 03/10/92

Description: Closed indoor hazardous waste storage pad now used for storing wood; paint stripe of the floor indicates boundary.



Photograph No. 7

Orientation: South

Description: Drum storage and accumulation of waste paint and mineral spirits, note staining on floor.

Location: SWMU 4

Date: 03/10/92



Photograph No. 8

Orientation: West

Description: Drum storage and accumulation of waste solvent; note debris in boxes; staining on walls and floor, and obscured labels.

Location: SWMU 4

Date: 03/10/92



Photograph No. 9

Orientation: North

Location: SWMU 5

Date: 03/10/92

Description: Accumulation of nonhazardous waste oils, lubricants, and oil emulsion in drums; area is fenced; entrance is through a locked gate.



Photograph No. 10

Orientation: West

Location: SWMU 6

Date: 03/10/92

Description: Seven drums of wash water from the closure of SWMU 1 being held near SWMU 3.

ATTACHMENT B
VISUAL SITE INSPECTION FIELD NOTES

Facility History.

1971 operations began
 Everything as was then except front part
 of building was leased to a couple of people.
 Always owned the buildings →

770' X

Used whole building since 77 or 78

Ownership

Parker Rust Proof Co. 60's

Hooker Chemical

Oxy Metal Finishing

Oxydental Petroleum purchased
 Hooker.

Names changed several times

when RCRA came into effect

Ford Motor Co. bought Parker facility

Henkel Corp purchased in 1987

also owned AmChem (major competitor)

so combined the two.

→ All offices & R&D laboratories -- customer
 service -- no production processes.

Facility Operations

Offices for salespeople, financial
 R&D group.

Customer service group.
 R&D on plating/coatings

lubricants group.
 auto deposition
 of coating (?)

auto phosphate
 Automotive, can, coil, cold
 forming
 general
 line indus.

Customer service - test pretreat on parts

No mfg. -

large coil to test would order chemicals from mfg. - 1 in Warren

1 in MI

* 1 in St Louis

1 in N.J.

Europe Asia, etc.

* Tanks for treating parts - \approx 750 gallon spray systems

302 people work here

R&D group \approx 50-60

Cust service \approx 12

Finance, sales, purchasing \approx Rest.

* Lab packs - quarterly basis contractor comes in & lab people get there waste - Currently Rollins Chem-Pack. - Michigan, Livonia (Farmington Rd) - last year or so - used others before.

A wide variety of wastes -- small quantity lab chemicals

13 Filter press sludge non haz. at this point

- 8-5 operation: he has a 2nd shift
(2 people) night/unitors
- Doors locked used access code / use
ADT
 - Shed is out in back -- in process of
closing
 - Maybe 30 or 40 drums of h.w lab
packs -- last quarter not all
55-gallon drums.
 - Quarterly 20-30 drums not all
55-gallon (some only 5 gallon)

Solvents - in small containers or
chlorinated lab pack

- Painting -- paint lab uses solvents
55 gal paint waste/solvent →
Recycler Petrochem -- use Chem
Met. Great Lakes Env. to Transport
4 drums/year -- may be more.

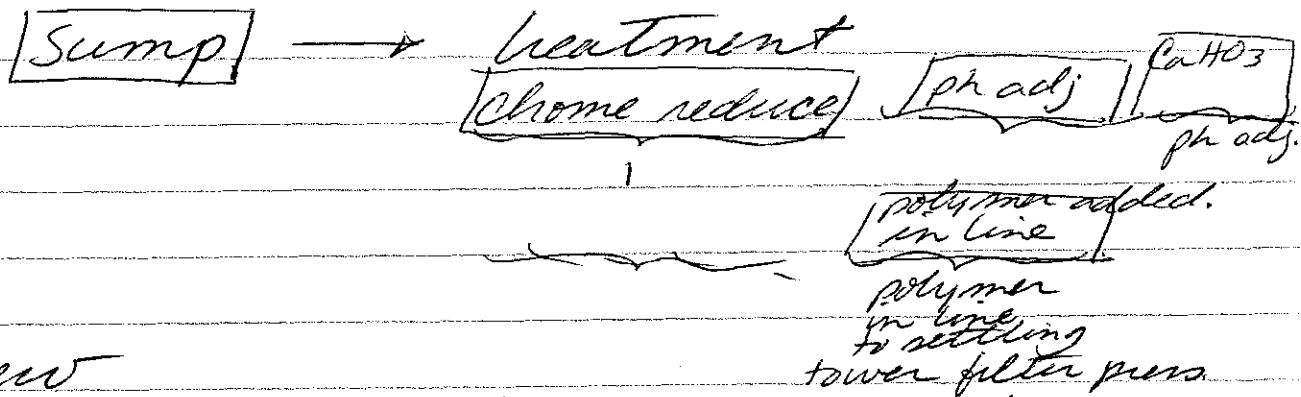
WMU
#62

- WASTIS 1971 original unit &
upgraded in fall of 1989.
Old system completely pulled
out new system installed →

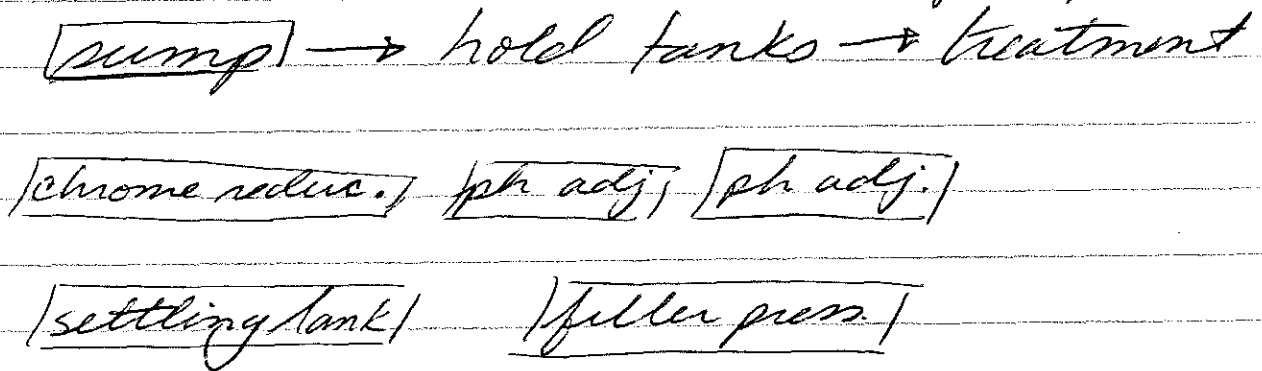
2/B

1989 Combined two companies & needed more capacity & upgrade. Permit w/ Detroit Water dept. No NPDES. No air permits -- exempt R&D facility.

Old one & new one similar Sump for R&D & cust. service old.



new



upgrade poly tank put inside old sump.

sump { R&D lab pipes
Cust service trenches & new area
trenches & pipes

Concrete trenches & sump.

* sampling pt prior to discharge -
city of Detroit & they submit 6
mth report w/ sampling results.

#1 Shed - is an accumulat point for
less than 90-day storage.
lab packs, solvent.
the shed was here when they
moved in.

#3 Pad - area used to be used prior
to used until 1987. - inside
the building - wood stored.
- cleaned & no longer used.

#4 Paint area - exterior building w/
blow out walls - he uses to
accumul. paint waste

#5 Stock Room - waste oil drum, }
lubricants } ^{breat lakes}
oil emulsion drum. } or chem met

* maybe 3 or 4 drums a year.

Scrap metal - - 1 for AI } junk man
1 for steel } picks up.

+ no idea how much is generated

sump 7,500 gallon capacity probably.
→ off-hand.

2/3

Closure -

submitted final assessment to
MDNR Dragun -- contractor.
excavation & resurfacing.
- how much soil was removed.

* Proposed excavation

less than 4 or 5 feet →
Engineering firm here before Parker. →
No protection processes.

No USTs

1 was removed -- oil storage,
installed during gas storage shortage
-- never used -- pulled.

City water

no on-site wells use city of Detroit
water.

* discharge effluent to city storm sewer
12 town drain to City of Detroit POTW

Spills/Releases -- none

spills in lab cleaned up. →
for 2 problems w/ WWTs -- few +
for between no excursions recently →

2/3

Walk Through

water drains through pitch from under test equipment to sump.

spray tanks -- diked & sumped.

high bay area --

line has miniature of coil coating line

min. al. can line line

all concrete & sump collects all the waste water.

concrete benches

Customer service.

small parts spray & dip tanks

pretreatment.

phosphate coating

→ gal. alum. - alum. zinc.

45/55 a little bit of silica.

spray paint room - spray or dip

- waste paint paint storage area.

Photo # 1

waste mineral spirits - Petrochem

used for parts cleaning -- scrubber w/ fiber brush.

tellike
accum.

7/12

3-10-92
-8-

wash water from shed on pallets
adj to old indoor drum storage pad

→ Pad photo (concrete, wood stored there now)
no longer used

→ 47 drums on pallets - analyzed 2 or
3 as part of closure

MONR will approve & they'll go into
wwTS - Photo taken.

new customer
~~autophoretic area~~ - trenches & pipe
stat

lead to wwTS

get parts from suppliers
a water based paint black

these are also about 750 gallons.

paint / rinse / water rinse.

waste sludge from paint -- non haz.

Great Lakes.

Newer labs - 2-3 years old.

automotive lab & autophoretic waste.
offices & eng. services

shop area -

weathering, opp., UV light.
walk in salt fog room.

3/13

3-10-92
-9-

More testing chambers -- salt fog 5 & 20%
-- parts tested

Back in office:

Non haz. waste generation rates

17000 lbs

~~220 gal.~~
2 lbs

750 lbs

110 gal

55 gal

55 gal.

1650 gal

220 gal.

3190 gal

110 gal

55 gal

55 gal.

1991

large & small quantity generator
did semi-annual.

2 weeks ago.

Biennial

0096
903194

water base paints from R&D

110 gal. 0006 chrome (from heating
steel)

#1 spent solvents F003 F004 F005

550 gals to Petro Chem MID 980615298.

#1 lab packs; poisons, corrosives, oxidizers, flamm.

0001, 0002, 0007, 0009 U080* methylene chloride
2012 gallon?

Y/B

Waste water treatment

4849000 lig. effluent.

1952720 solid sludge. (lbs)

Transporters

Mat Lack, Inc

T

Chem Met

T

Great Lakes

T

Petrochem Processing TSPR

Solvent Distillers, Inc. T.

Shed - -

area dug out -- diked area

concrete -- fresh oil dry

sealing of cracks done & corners.

filter press sludge being stored

2 high - 20 filter press

ACC 8861 waste antiphreter - 4 drums

a lot (x 8 drums unlabeled black

x 2 high = 16 high)

heat transfer oil ~6 drums

front 2 no label & he has no
idea

some water entering due to rain seep
drums on pallets.

28

3/10/92

Parker + Auchter

M17D 005 362 223

Madison Hts, MI

8:15 onsite 35° raining

Carla Buriks, PRC

Judy Wagner, PRC

George Beyer, Parker-Auchter

History

Operations began here 1971

(moved from Detroit)

Company HQs

Operations have been the

same since then w/some

expansion, purchasing another

company. 1987 discontinued leasing

southern end.

Size: 770x

SW

SW

30

3-10-92

Prior to '60's Parker Rust Prod.
 then Hooker Chemical
 name changes
 Lind '60s Oxy Chemical
 more name changes
 then purchased by Ford
 9/83 - this facility only
 1987 # entel Corp - current
 owners. Hentel also owned
 Hentel - Parker & Auchen
 combined to what it is now.

All ~~past~~ offices & R&D here.
 "no production" no manufacturing

Facility Operations

Offices, sales, financial
 R&D: customer service
 automotive, can, general line,
 cold extruding, autophoretic, etc

3-10-92

lubricants, more...
 * Business used to be
 primarily metal finishing -
 to help paint stick

autodisposition - autophoretic
 Customer service for specialized
 jobs (customer specific)

Manufacturing

plants nationwide &
 international

Treating parts in 750 gal
 tanks in back for example.
 pick lines, treating

302 employees

HW

31

32

3-10-92

R&D - ~ 50-60 people
Sales - most

Customer Service ~ 12 people

Hours of operation - 8-5

Small 2nd shift, cleaning!
Janitors on 3rd

Lab Packing

Rollins
Chem Pack

Done quarterly; lab ^{work} in

workshops being unusable

chemicals to central area

where lab packs are

made. Rollins under

contract for about 1 year

Major waste

last quarter
~~40-50~~ 30 drums

1. Lab packs but names \oplus

2. Filter cake sludge - Non
haz.

\oplus not all 55-gallon
some smaller

JHW

33

3-10-92

Security

Locked doors - with

coded locks.

After hours - ADT

Shed outside - Storage,

going through closure

Lab Pack -

average will be 20-30

drums, with 0 + varying

sizes

Solvents

- Small quantity or chlorinated

to lab pack

- Paint solvent - ^{4 drums} ~~larger per year~~

quantities, generated ^{recycles,}

Separately, to Petrochem

transporters vary Great Lakes
or JHW

34

WWTs

installed at mine in
fall '89 new system
on line.

Completely new system,
old system removed

Why? to handle expansion,
large quantities & to
update system.

- Permit with Detroit
water department, no
NPDOS

- Air permits

none, exempt because
R&D

3-10-92

3-10-92

WWTs

Sump from all R&D &
Customer Service to one of
new w/ 2-15000 gal
tanks, above ground, poly-plastic
- Sump-added plastic liner w/ addition
1. to chrome reduction
system (with acid to trivalent
or)

2. to pH adjusted (2 stages)
pH, are similar

3,4,5 Polymur added in line,
to settling towers &
filter press

Solid Separator
- Overflow from settling &
Separating to Sewer

- Filter cake, now 1000, to 55 gal
100 drums, off-site disposal
- Liquids from filter press are recycled in site

JW

35

36

WWTs cont.

Sources: piped from

trenches B & D

trenches from customer

services.

- at Carla -

Detritus samples

Reported by facility every

6 months w/ sampling

results

Contact - ?

Filter press draws to

Shed

3-10-92

WWTs cont.

Sources: piped from

trenches B & D

trenches from customer

services.

- at Carla -

Detritus samples

Reported by facility every

6 months w/ sampling

results

Contact - ?

Filter press draws to

Shed

3-10-92

Shed

here originally, when moved

in. Separate from main

bdg, but enclosed. Soil

sampling for closure.

2nd storage area, indoors

cleaned

Accumulation Areas

① Stock room - for oil drum

② Near blow out wall

③

Oil disposal - picked up by

Great Lakes or

Disposed when full, 3-4/year

Scrap metal - picked up by junk man

1. Aluminum 3 generation rate

2. Steel unknown

juw

37

38

3-10-92

Iron Part A - 75,000 gal
capacity - probably from
old WWTs

Closure

- of storage pad
- Contractor has submitted final assessment to RIDPR, waiting for approval.
- Soil was removed; less than 5' deep.
- Requested volume of waste soil information.
- Contractor - Dragun Corp

Facility previously owned
by engineering firm.

JW

39

3-10-92

WSTs

oil storage tank, removed,
1-1 1/2 years ago, supposedly
never used.

- no on-site wells
- use Detroit drinking H₂O

Bordering facilities

- East - industry
- South - manufacturing
- North - Hotel
- West - small businesses

Twelve town drain -

city storm sewer to Detroit
Sanitary sewer along
Columbia

JW

4/10

3-10-92

3-10-92

41

Spills or releases

none known of, to
air or GW

Exceedances from WWTs
very few

9:20 am Facility Tour
viewed several labs
some labs w/

High Bay Area -
miniature coil line

miniature A1 can line
system to clean tanks
cans before inkling
JHW

Customer Service Area

spray tanks & dip tanks

* So far all areas are
diked and or trenches &
sumps, which drain
(not pumped)

Paint Room -

small spray on dip tanks

* Paint storage area

Photo #16 ① South 9:30

~~waste paint & mineral~~
spirits

Photo #17 ② West 9:30
waste solvent

JHW

42

(3)

Photo #18

work

9:35

nonhazardous waste

accumulation

12 stock room

WWT

- sump w/ tank

3 chrome reduction tanks

3 pH adjust

Photo 19

(4)

Sump - yellow

grate

- work

Photo 20

(5)

WWT work

upper deck tanks

Discharge behind drum

Photo 21

(6)

South 9:40

Fl-Hr press storage drum

JHW

3-10-92

Photo 22

(7)

East 9:45

former storage

closed

Photo 23

(8)

West 9:45

2 Drums of wash water from

Shed closure

Customer service area

series of tanks for

autophoretic process

tank contents disposed of

South end of building

Automotive + Autophoretic

JHW

44

Access tented lab -
salt ~~sp~~ chambers
weathering lab
humidity etc,
use salt chambers
to test corrosion

End four 10 am

Review biannual report 191
Got non-lac quantities

Photo 24 (9) 10:15 am
Outdoor shed
holding non-lac filter
press sludge + auto-
photoc waste
Diked, sealed cracks

SW

45

10:15

Photo 25 (10)

West
Shows diked, non-
cement, sealed cracks
Inside for wrap-up

Off site 10:40

SW

Facility Name PARKER CHEMICAL COMPANY
Location (City, State) MADISON HEIGHTS, MI
EPA I.D.# MID 057676124
Reviewer Name STEPHENSON
Date of Review 3/20/86

SUMMARY OF FACILITY CERTIFICATION
REGARDING POTENTIAL RELEASES
FROM SOLID WASTE MANAGEMENT UNITS

- (1) Are there any solid waste management units?

Yes _____ No X Undetermined _____

- (2) If answer to (1) is Yes, list the units by type, number and operating status. If answer to (1) is No or undetermined, go to Question (5).

	<u>Type of Unit</u>	<u>Status</u>
a.	_____	_____
b.	_____	_____
c.	_____	_____
d.	_____	_____
e.	_____	_____
f.	_____	_____
g.	_____	_____
h.	_____	_____
i.	_____	_____
j.	_____	_____

- (3) For each type of unit listed in (2), summarize the types and volumes of wastes handled.

	<u>Type of Unit</u>	<u>Type of Waste</u>	<u>Volume of Wastes</u>
a.	_____	_____	_____
b.	_____	_____	_____
c.	_____	_____	_____
d.	_____	_____	_____
e.	_____	_____	_____
f.	_____	_____	_____
g.	_____	_____	_____
h.	_____	_____	_____
i.	_____	_____	_____
j.	_____	_____	_____

- (4) Summarize all releases of hazardous waste or constituents, and check box as to whether company claims it was fully corrected.

	<u>Releases</u>	<u>Corrected?</u>		
a.	<u>NONE</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
b.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
c.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
d.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
e.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
f.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
g.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
h.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
i.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>
j.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Undetermined <input type="checkbox"/>

(5) Certification: Yes ☒ No ☐

(6) Is additional information necessary? Yes ☐ No ☒

(7) Comments: ① CERTIFICATION WAS SIGNED BY THE TECHNICAL SUPPORT
MANAGER